

[4910-13-U]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39 [66 FR 4654 1/18/2001]**

**[Docket No. 2000-SW-52-AD; Amendment 39-12074; AD 2001-01-04]**

**RIN 2120-AA64**

**Airworthiness Directives; Sikorsky Aircraft Corporation Model S-76A, S-76B, and S-76C Helicopters**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD) for Sikorsky Aircraft Corporation (Sikorsky) Model S-76A, S-76B, and S-76C helicopters. This AD requires initial and repetitive inspections of the main landing gear positioning rod assembly (rod assembly) and the side brace rod end (rod end) for corrosion. If any corrosion is found, this AD requires replacing any part that is corroded with an airworthy part before further flight. This amendment is prompted by a landing gear collapse caused by corrosion due to dissimilar metals in the landing gear rod end. The actions specified in this AD are intended to detect corrosion of the threaded joint in the rod assembly to prevent a collapse of the landing gear, and subsequent loss of control of the helicopter during landing.

**DATES:** Effective February 2, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as February 2, 2001.

Comments for inclusion in the Rules Docket must be received on or March 19, 2001.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2000-SW-52-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

The service information referenced in this AD may be obtained from BF Goodrich Landing Gear Division, Attn.: Kenneth R. Madej, 8000 Marble Ave., Cleveland, OH 44105, telephone (216) 429-4461, fax (216) 429-4357. This information may be examined at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

**FOR FURTHER INFORMATION CONTACT:** Jeffrey Lee, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7161, fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** This amendment adopts a new AD for Sikorsky Model S-76A, S-76B, and S-76C helicopters. This AD requires, within 14 days, inspecting the rod assembly, part number (P/N) 1945E-31A or 2071-31, and rod end, P/N 1945E235 or 2071-235, for corrosion. If the rod assembly and rod end were inspected and reassembled in accordance with BF Goodrich Component Maintenance Manual with Illustrated Parts List, 1945/2071 Series Main

Landing Gear, No. 32-10-01, (formerly titled Cleveland Pneumatic Maintenance Manual 32-10-01), Revision 4, dated December 15, 1994, within the past 24 months, this AD requires an inspection within 90 days. If any corrosion is found, this AD requires replacing the unairworthy part with an airworthy part before further flight. This AD also requires, at intervals not to exceed 90 days, a repetitive inspection for corrosion on certain rod ends. For other rod ends, this AD requires a repetitive inspection for corrosion at intervals not to exceed 12 months or 1,500 hours time-in-service, whichever occurs first. This AD is prompted by a landing gear collapse on a helicopter that was in a hangar. Analysis showed that corrosion due to dissimilar metals in the rod end caused the rod end to fail with subsequent collapse of the landing gear. The actions specified in this AD are intended to detect corrosion of the threaded joint in the rod assembly and prevent a collapse of the landing gear and subsequent loss of control of the helicopter during landing.

The FAA has reviewed BF Goodrich Landing Gear Service Bulletin No. 76A-32-03, Revision 1, dated September 15, 2000, which describes procedures for inspecting and repairing or replacing the rod end and rod assembly.

Since an unsafe condition has been identified that is likely to exist or develop on other Sikorsky Model S-76A, S-76B, and S-76C helicopters of the same type design, this AD is being issued to detect corrosion of the threaded joint in the rod assembly and prevent a collapse of the landing gear. This AD requires inspecting the rod assembly and rod end for corrosion at specified intervals and replacing, before further flight, any component that has corrosion. The actions must be accomplished in accordance with the service bulletin described previously. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the structural integrity of the helicopter. Therefore, the actions previously mentioned are required within 14 days, and this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

The FAA estimates that 180 helicopters will be affected by this AD and that it will take approximately 4.5 work hours per helicopter to inspect the rod assembly and rod end and 1.5 work hours to remove and replace the rod assembly and rod end, if necessary. Required parts will cost approximately \$14,600 per helicopter. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$2,692,800 (\$14,960 per helicopter, assuming inspecting, removing, and replacing the rod assembly and rod end once).

### **Comments Invited**

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their mailed comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2000-SW-52-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

# AIRWORTHINESS DIRECTIVE



Aircraft Certification Service  
Washington, DC

U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

*We post ADs on the internet at "av-info.faa.gov"*

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

**2001-01-04 SIKORSKY AIRCRAFT CORPORATION:** Amendment 39-12074. Docket No. 2000-SW-52-AD.

**Applicability:** Model S-76A, S-76B, and S-76C helicopters up to and including serial number 760513 with positioning rod assembly (rod assembly), part number (P/N) 1945E-31A or 2071-31, or side brace rod end (rod end), P/N 1945E-235 or 2071-235, installed, certificated in any category.

**NOTE 1:** This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To detect corrosion of the threaded joint in the rod assembly and prevent a collapse of the landing gear and subsequent loss of control of the helicopter during landing, accomplish the following:

(a) Within 14 days, inspect the rod assembly and rod end for corrosion in accordance with Section 2., Accomplishment Instructions, in BF Goodrich Service Bulletin No. 76A-32-03, Revision 1, dated September 15, 2000 (SB), except that scrapping of corroded parts is not required. Replace any part that is corroded with an airworthy part before further flight.

(b) Within 90 days, if the rod assembly and rod end were inspected and reassembled in accordance with BF Goodrich Component Maintenance Manual with Illustrated Parts List, 1945/2071 Series Main Landing Gear, No. 32-10-01, (formerly titled Cleveland Pneumatic Maintenance Manual 32-10-01), Revision 4, dated December 15, 1994, within the past 24 months, inspect the rod assembly and rod end in accordance with Section 2. of the SB. Scrapping of corroded parts is not required. Replace any part that is corroded with an airworthy part before further flight.

(c) At intervals not to exceed 90 days, for rod ends that are not reassembled with Mastinox sealant or reassembled with Mastinox sealant but without cadmium plate restoration, inspect the rod assembly and rod end for corrosion in accordance with the Section 2. of the SB, except that scrapping

of corroded parts is not required. Replace any part that is corroded with an airworthy part before further flight.

(d) At intervals not to exceed 12 months or 1,500 hours time-in-service, whichever occurs first, for rod ends assembled with Mastinox sealant and cadmium plate restoration or for rod ends reassembled with Mastinox but that did not previously require rework due to corrosion, inspect the rod assembly and rod end for corrosion in accordance with the Section 2. of the SB, except that scrapping of corroded parts is not required. Replace any part that is corroded with an airworthy part before further flight.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Boston Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Boston ACO.

**NOTE 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Boston ACO.

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished.

(g) The inspections shall be done in accordance with Section 2., Accomplishment Instructions, in BF Goodrich Service Bulletin No. 76A-32-03, Revision 1, dated September 15, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from BF Goodrich Landing Gear Division, Attn.: Kenneth R. Madej, 8000 Marble Ave., Cleveland, OH 44105, telephone (216) 429-4461, fax (216) 429-4357. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on February 2, 2001.

**FOR FURTHER INFORMATION CONTACT:** Jeffrey Lee, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7161, fax (781) 238-7199.

Issued in Fort Worth, Texas, on January 5, 2001.

Henry A. Armstrong, Manager, Rotorcraft Directorate, Aircraft Certification Service.